### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000929

Address: 333 Burma Road **Date Inspected:** 16-Nov-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 1300 **Project Name:** SAS Superstructure **OSM Departure Time:** 2330 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Xu Lefang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** 77,89, 114 Meter Mock-Up & OBG

**Summary of Items Observed:** 

Mock-Up 77

This Quality Assurance Inspector observed the fitting and tack welding of the web plates to diaphragm SA95 and SA104. The ZPMC welders were Yong Lei, welder identification 040690 and Zhai Qing Yan, welder identification 058026. Some of the essential welding variables observed were the voltage at 23, the amperage at 190, the per-heat at 190 degrees Celsius and the travel speed was 150 millimeters per minute.

Mock-Up 89

This Quality Assurance Inspector observed the tack welding of MUSB-MA38-1 skin plate E with the shield metal arc welding process. The welders were Dai lu, welder identification 048659 and Wang Zhou Ghua, welder identification 053753.

Mock-Up 114

This Quality Assurance Inspector observed welding by ZPMC welder Chang Chuancang, welder identification 053870 on MUC A67. The essential welding variables were observed and found to be a voltage of 31.9, an amperage of 308, a pre-heat of 125 and a travel speed of 346 millimeters per minute.

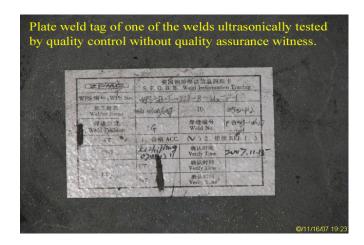
**OBG** 

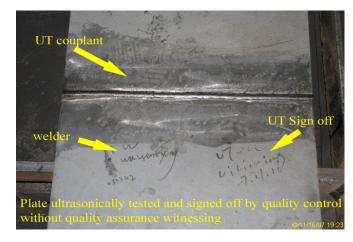
# WELDING INSPECTION REPORT

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This Quality Assurance Inspector observed shield metal are tack welding by ZPMC welder Duan Yanggang, welder identification 066422 on FB016-026 in the flat welding position. Some of the essential welding variables were checked and found the voltage to be 23 and the amperage 154.

Ultrasonic testing was carried out by ZPMC in bay 7 on twenty some plates, each of which had two complete joint penetration welds. Quality Assurance was not informed of the testing until after completion.





### **Summary of Conversations:**

No conversations held today.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Berger,Bruce	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer